

Date: Thursday, 28/05/2009 8:28:50 AM  
 User: Melanie Fauteux

## Process Sheet

<b>Customer</b> :	CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b> :	STRUT WELDMENT ASS'Y
<b>Job Number</b> :	48224		
<b>Estimate Number</b> :	10678		
<b>P.O. Number</b> :		<b>Part Number</b> :	D3443043
<b>This Issue</b> :	28/05/2009	<b>S.O. No.</b> :	
<b>Prsht Rev.</b> :	NC	<b>Drawing Number</b> :	D3443 REVB
<b>First Issue</b> :	//	<b>Project Number</b> :	N/A
<b>Previous Run</b> :	48079	<b>Drawing Revision</b> :	B
<b>Written By</b> :		<b>Material</b> :	
<b>Checked &amp; Approved By</b> :	MF 09-05-28	<b>Due Date</b> :	04/06/2009
<b>Comment</b> :	EST. REV. A 05.11.17 NEW ISSUE EC	<b>Qty:</b>	1
		<b>Um:</b>	Each

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0 D34437

Tubing



(2) epl



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
1	D3443-7	TUBING	✓ 346560

Pl 09.05.29

2.0 D34433

Clevis



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s) \*

Pick:

Qty	Part Number	Description	Batch
1	D3443-3	CLEVIS	✓ D3443-12 346143

Pl 09.05.29

3.0 238805

SS DOWEL PIN 3/4" LONG



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
1	238-805	SS DOWEL PIN 3/4" LONG	✓ M111089

Pl 09.05.29

4.0 LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1  
 Weld assembly as per dwg D3443

Pl 09.05.29

(PK) →

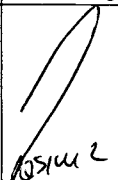
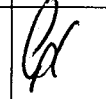
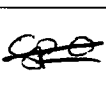

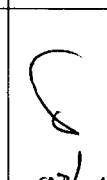
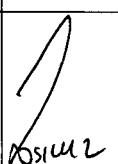
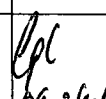
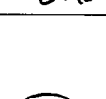

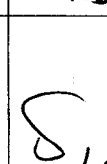
(X1)

Spec. 06.02.02

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3443-043 PAR #: N/A Fault Category: Prod / Ins Lrg NCR: (Yes) No DQA: D Date: 09/06/14  
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: D Date: 09/06/14

NCR: <u>48224</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
09/06/01	4.0	During inspection it was found that 16 wing clevis was welded on. welder used D3443-1 should have used D3443-3.		Scrap and destroy hole Assembly will be too short to be use. AND Replace Qty (4)	 09-06-01	 09/06/10		 09/06/01
		R.C. Lack of attention welder didn't		* w/o + Day <del>are</del> clear * D3443-2 B 46560 D3443-3 B 48083	 09-06-01	 09/06/10		 09/06/01

NOTE: Date & initial all entries

Date: Thursday, 28/05/2009 8:28:50 AM  
User: Melanie Fauteux

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STRUT WELDMENT ASS'Y

Job Number: 48224

Part Number: D3443043

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC9

VISUAL WELDING INSPECTION



PD 09-06-10

Comment: VISUAL WELDING INSPECTION

~~PD 09-06-01-11~~

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

SD 09/06/10 (K1)

7.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

1-Mask holes as per dwg D3443

2-Powder Coat White Gloss (Ref: 4.3.5.2) as per QSI 005 4.3

START TIME: 9:00am

OVEN TEMPERATURE: 400°F

FINISH TIME: 9:30am

SD 09-06-10 ✓ 1

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

FD 09/06/10 (1)

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock  
Location: GR

SD 09/06/10 (1)

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/06/10

Job Completion



MF  
09-06-10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

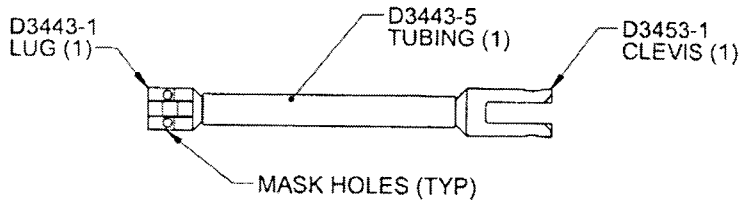
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**DART**

DESIGN RF	DRAWN BY RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3443</b>	REV. B SHEET 1 OF 3
DATE <b>05.12.05</b>		TITLE <b>STRUT WELDMENT ASSEMBLY</b>	SCALE 1:4
A	05.09.02	NEW ISSUE	
B	05.12.05	ADDED -9 PIN; REMOVED BALL PLUNGER; REVISE TOLERANCE; & $\phi 0.125$ WAS #30	

RELEASED

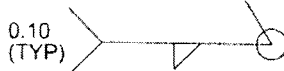
05.12.09 *[Signature]*

PRESS FIT McMASTER-CARR P/N 63215K32  
BALL JOINT BEARING AFTER POWDER COAT

8.54

INSTALL SPAENAUER  
P/N 238-805 DOWEL PIN  
(TYP)

0.10  
(TYP)



D3443-7  
TUBING (1)

D3443-3  
CLEVIS (1)

9.78

INSTALL SPAENAUER P/N 238-805  
DOWEL PIN

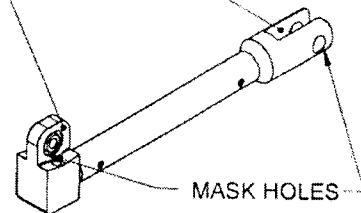
.1875

0.10

**NOTES:**

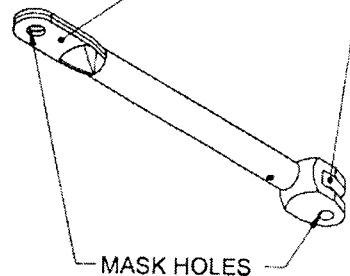
- 1) WELD PER DART QSI 004
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) IDENTIFY WITH DART P/N USING FINE POINT PERMANENT INK MARKER

PARALLEL  
FACES

**D3443-041**

48224

PARALLEL  
FACES

**D3443-043**

328

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**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

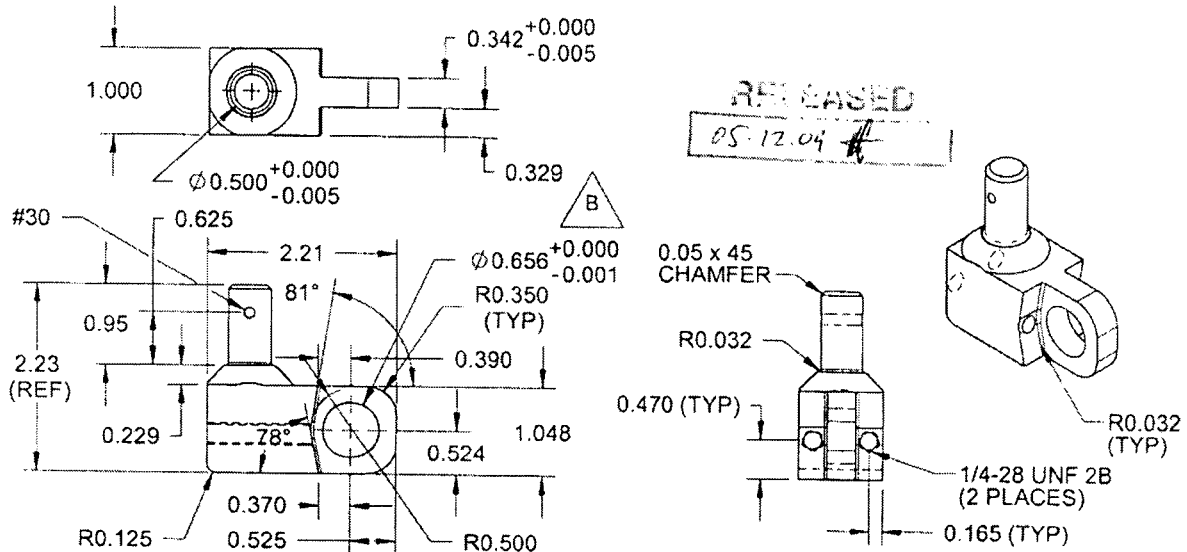
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

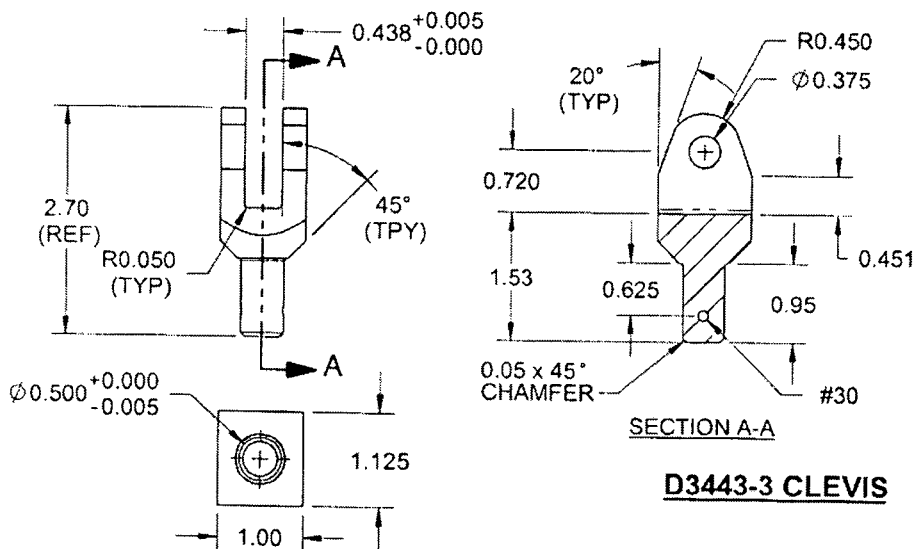
**NOTE:** Date & initial all entries

**DART**

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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3443</b>
DATE <b>05.12.05</b>	TITLE <b>STRUT WELDMENT ASSEMBLY</b>	REV. B SHEET 2 OF 3 SCALE 1:2

**D3443-1 NOTES:**

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC M17-4B)

**D3443-3 NOTES:**

- 1) MATERIAL: AISI 304 SS ROUND BAR (REF. DART SPEC M304R)

**GENERAL NOTES:**

- 2) FINISH: NONE  
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED  
4) ALL DIMENSIONS ARE IN INCHES  
5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.010

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

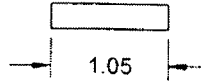
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

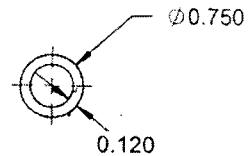
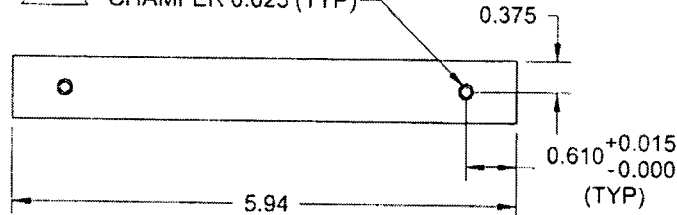
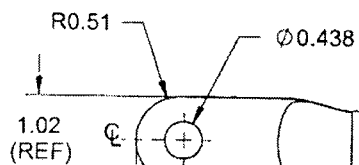
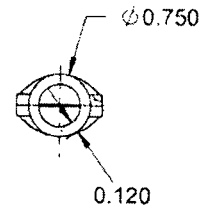
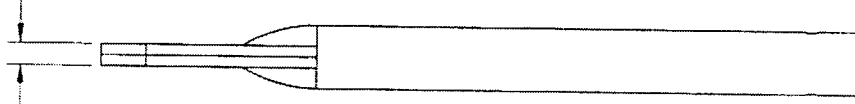
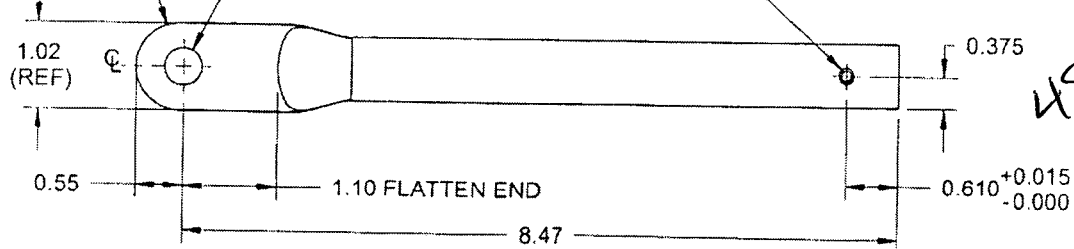


**DART**

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CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3443	REV. B SHEET 3 OF 3
DATE 05.12.05	TITLE STRUT WELDMENT ASSEMBLY 1.2		

 $\varnothing 0.210^{+0.005}_{-0.010}$ **D3443-9 PIN****D3443-9 NOTES:**

- 1) MATERIAL: DELRIN II 150R OR ACETRON GP ACETAIL (REF. DART SPEC M-DELRIN-R)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES

DRILL  $\varnothing 0.125$  THRU  
CHAMFER 0.025 (TYP)**D3443-5 TUBING** $0.260^{+0.000}_{-0.030}$ DRILL  $\varnothing 0.125$  THRU  
CHAMFER 0.025**D3443-7 TUBING****D3443-5/-7 NOTES:**

- 1) MATERIAL: AISI 316/304 SS SEAMLESS TUBING (REF. DART SPEC M304TR0.7500W.120)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.025

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